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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/932,976	08/21/2001	Stephen B. Auger	WOOD INFUSIONS	3525

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08/08/2002

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EXAMINER

EINSMANN, MARGARET V

ART UNIT

PAPER NUMBER

1751

DATE MAILED: 08/08/2002

9

Please find below and/or attached an Office communication concerning this application or proceeding.

A 8-9

Office Action Summary

Application No.

09/932,976

Applicant(s)

AUGER, STEPHEN B.

Examiner

Margaret Einsmann

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-18 and 20-56 is/are pending in the application.
- 4a) Of the above claim(s) 23-52 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) 1-18, 20-22 and 53-56 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Applicant's amendment filed 6/10/2002 has been entered and applicant's remarks carefully considered. Claim 19 has been canceled. The pending claims are 1-18 and 20-56. Claims 23-52 are withdrawn from consideration as being directed to a non-elected invention. Claims 1-18, 20-22 and 53-56 are being examined in this action. The copy of the IDS from the parent application has been received and the references thereon have been considered.

Election/Restrictions

This application contains claim 23-52 drawn to an invention nonelected with traverse in Paper No. 4. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01. Applicant should note that method claim 53 is dependent on the kit of claim 30. When claim 30 is canceled, claim 53 will need to be written in independent form.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 2-18, 20-22, 53-56 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The process as described in claim 2 has steps (a) and (b) which are contacting and penetrating the surface of the wood with a metal salt in a solvent. Are these really two different steps? The same is true of steps (c) and (d). It appears that the second step (b) or (d) is merely a description of

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how the wood is contacted with said formulations in (a) or (c) Regarding step (e) how are the two formulations reacted? Are they heated or otherwise encouraged to react? If not then this is not a separate step. It merely happens as a result of the two solutions being brought into contact with each other. Step (f) is also not a separate process step. It is merely a statement of the result of penetrating the wood with the two solutions. What is meant by the term "sequentially" in claims 2 ? The wood penetrated with the oxidizing agent solution which , ipso facto results in steps (e) and (f) happening. Regarding claim 53, the term sequentially also appears there. In that claim, the above comments also apply. It appears that steps (c) and (d) could be incorporated into step (b) because they are the result of the two solutions coming into contact with each other.

Applicant's arguments regarding the above rejection are not persuasive. The rejection remains as stated. Applicant has not shown separate steps of penetrating, reacting etc.

Claim 8 objected to as containing a double inclusion; copper(II) chloride is repeated twice on line 13 of claim 8.

Claims 2-18, 20-22, 53-56 are rejected under 35 U.S.C. 112, second paragraph, as failing to set forth the subject matter which applicant(s) regard as their invention. Evidence that the claims fail(s) to correspond in scope with that which applicant(s) regard as the invention can be found in Paper No. 8 filed 6/19/02. In that paper, applicant has stated on page 5, "Bures describes staining wood by three steps, **not two**

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steps of the present invention", and this statement indicates that the invention is different from what is defined in the claim(s) because each of the independent claims claim at least four steps.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 2, 4-7, 10, 11, 13, 17, 18, 20-22 and 53-55 are rejected under 35 U.S.C. 102(b) as being anticipated by Dombay, US 3,554,785.

Example 4 discloses a process for treating teak with a kit as claimed in order to obtain a color on the wood. The kit comprises a solution A which contains the metal salt cupric sulfate as well as hydrochloric acid as claimed. The composition is diluted with water and applied to the wood. Thereafter the wood is dried. The wood is then treated with a second aqueous solution which contains hydrogen peroxide. See col 3 lines 19-25. The wood is then treated with a nitrocellulose lacquer (sealant) as claimed. This method takes place at room temperature. Example 5 discloses treating wood with a first composition containing potassium permanganate, wherein the composition is diluted with water. After drying the wood, the wood is treated with a hypochlorite

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composition and then with a solution of hydrogen peroxide. Therefore, the process as claimed is anticipated.

Claims 2, 4,5,6,10,11,13,17,18, 20, 53-55 are rejected under 35 U.S.C. 102(b) as being anticipated by Matsushita, JP 60-250906. See English translation.

A process of bleaching wood to impart a light color thereto is taught whereby an aqueous solution of a metal salt selected from cobalt or nickel nitrate, potassium carbonate, calcium carbonate or sodium carbonate is applied to a board, the board is cured (the claimed drying step) and then an aqueous solution of hydrogen peroxide is applied. The metal salt is applied to activate the hydrogen peroxide, which is a reaction process. See the English translation, pages 1-4. Accordingly Matsushita anticipates the claims.

Claims 2, 4-7, 10-22, 53-56 are rejected under 35 U.S.C. 102(b) as being anticipated by Bures, CS145495. See English translation. A process of staining any kind of wood is taught (p7 last paragraph) whereby three solutions are applied sequentially to wood. Both the first and last solutions contain metal salts and/or bleaching agents . Page three states that the first step is to treat the wood with at least one salt or at least one peroxide oxidizing agent, and the third step treats with at least one complex of copper, silver, nickel or permanganate. Permanganate is a bleaching agent. Page 5 first paragraph states that the solution of the first step uses a mixture of salts, including alkaline metals and peroxides, hyperoxides, or peracids. The latter three are all oxidizing agents. The wood may be dried between applications (p 7 second paragraph). Example 1 on page 8 discloses treating dried birch with an aqueous

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solution comprising hydrogen peroxide and then with an aqueous solution of silver nitrate. In example 2 on page 9, both the first and third solutions contain both bleach and a metal salt; the first solution contains the bleach ammonium persulfate and the metal salt, copper sulfate in an aqueous alcohol solution; the second solution contains potassium permanganate, which is both a bleach and an oxidizing agent, and two other metal salts, zinc sulfate and sodium aluminate. See also claim 1 on page 11 which claims treating wood with a peroxide or peracid in a mixed solvent in a first step, and treating with a compound of silver, copper, nickel or permanganate (bleaching agent) in the last step. Accordingly all of the material limitations of the instant claims are taught.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dombay, Bures or Matsushita as applied to the claims above further in view of Armstrong et al., US 5,242,464. All three of the above references teach bleaching wood with a solution of hydrogen peroxide. Neither teaches bleaching with a solution comprising sodium hydroxide or sodium peroxide as claimed in claims 3 and 9. Armstrong teaches that it is traditional to bleach wood with a two part solution of sodium

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hydroxide and hydrogen peroxide. Armstrong provides an improved bleach comprising a solution having both the claimed sodium hydroxide and hydrogen peroxide in one solution. See col 3 lines 14-17. The examiner notes that said solution is also a solution of the claimed sodium peroxide since sodium and peroxide ions are in the aqueous solution. Armstrong states that the bleaching of wood with his method achieves uniformity and depth of penetration. Col 2 lines 35 et seq. It would have been obvious to the man having skill in the art at the time the invention was made to add sodium hydroxide to the bleach of Dombay, Bures or Matsushita for the benefits stated by Armstrong et al., that is to stabilize the hydrogen peroxide to provide uniform penetration.

Response to Arguments

Applicant's arguments filed 6/10/2002 have been fully considered but they are not persuasive.

Applicant argues the 102 rejection over Dombay by stating that the process disclosed therein is a two step bleaching process. While that may be so, patentee discloses applicant's process of treating with a metal salt and with a bleaching agent and reacting the two in situ to provide a color change. Additionally, applicant's attention is directed to applicant's claims 7 and 8 where the metal salt may be a perchlorate. Perchlorates are bleaching compounds. Accordingly, when applicant uses a perchlorate as a metal salt, he indeed has two bleaching steps. Additionally, applicant's comprising claims do not rule out processes comprising more than one bleaching step.

Applicant argues the rejection under 102(b) over Matsushita by stating that Matsushita only describes bleaching. Applicant then states that transition metal ions are used. However, the step of applying the metal salt as claimed followed by applying the bleaching agent as claimed is clearly taught. Said applied chemicals react in situ and result in a color change.

Applicant argues the rejection under 102(b) over Bures by stating that he describes a three step process, not a two step process as claimed. Applicant's comprising claims do not rule out processes comprising more than two steps.

Applicant argues that Armstrong is not properly combinable with either of the above three references because he teaches only a single step, not a step where compounds are reacted in situ. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Armstrong is directed to a process of bleaching wood and is applied to show conventional products for bleaching wood, since applicant's process includes a wood bleaching step. Applicant argues that Armstrong is directed to a single step, which teaches away from the combination. The examiner respectfully disagrees with this analysis. Armstrong need not teach a multi-step process since each of the three

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primary references teaches multistep processes. Armstrong is applied for his teaching of the benefits obtained in wood bleaching by adding sodium hydroxide to hydrogen peroxide in a process of bleaching wood.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Margaret Einsmann whose telephone number is 703-308-3826. The examiner can normally be reached on 7:00 AM -4:30 PM M-Th and alternate Fridays.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra Gupta can be reached on 703-308-4708. The fax phone

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numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

4/3/02


Margaret Einsmann
Primary Examiner
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